

DETROIT WATER TEMPERATURE CONTROL AND DOWNSTREAM PASSAGE

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WFFDWG Mtg

CENWP

04 Sept 2018

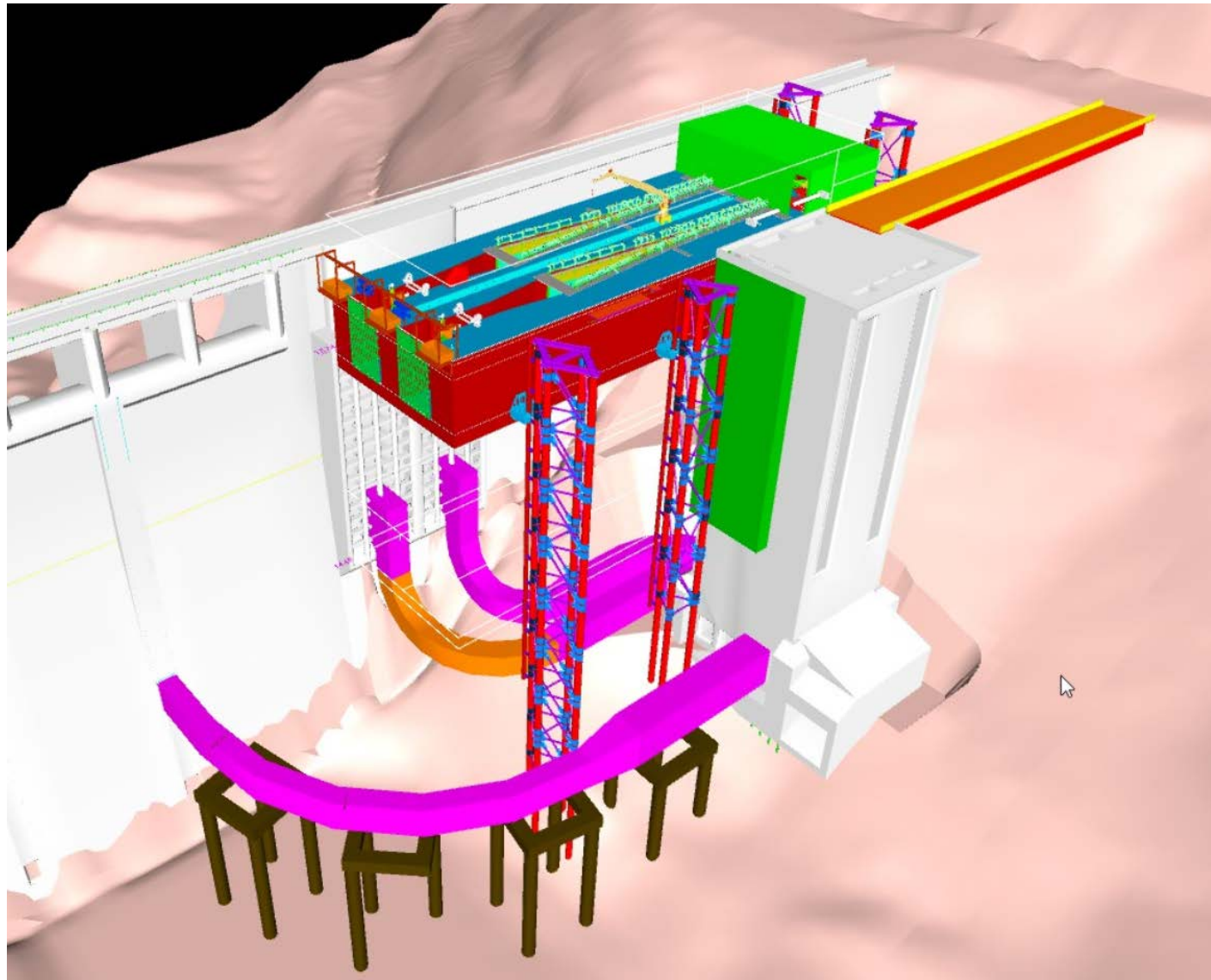


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NOTE:
TAMPER GATE

ORIGINAL SWS BUILD IN THE DRY ALTERNATIVE



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DETROIT TEMPERATURE CONTROL- DRAWDOWN IMPACTS - BLUF

Recreation Impacts

- Loss of business revenue

Downstream Water Supply Impacts (July – October)

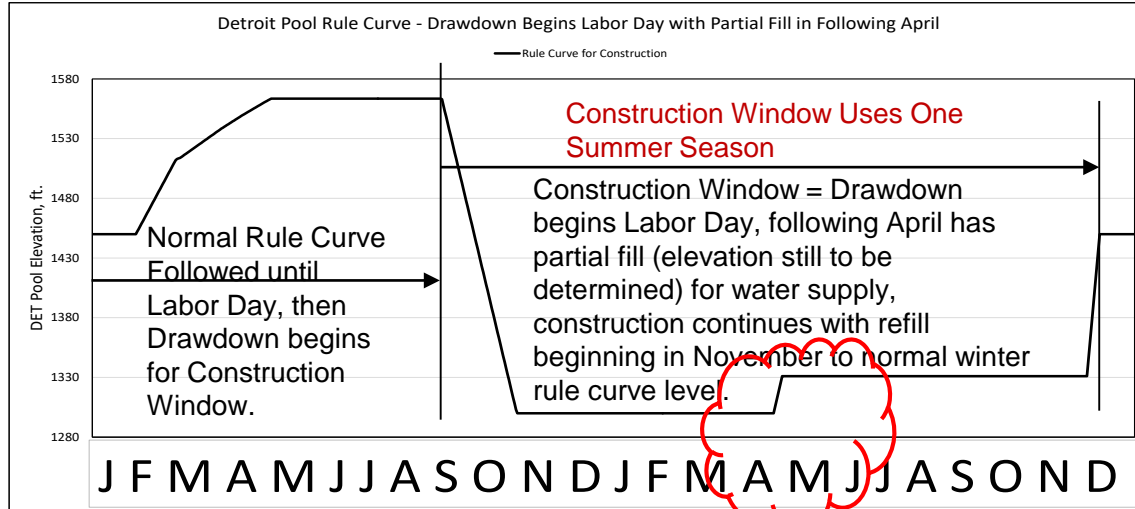
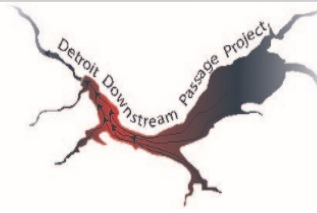
- Municipal water supply
 - Cities of Salem, Stayton, Turner, Gates... withdraw municipal water
 - City of Salem alone – 192,000 residents and businesses impacted
 - No full scale backup systems exist
- Agriculture
 - 850 farmers on over 17,000 acres rely on North Santiam for irrigation water
 - Many crops perennial – loss of water – loss of plant

Bottom-line

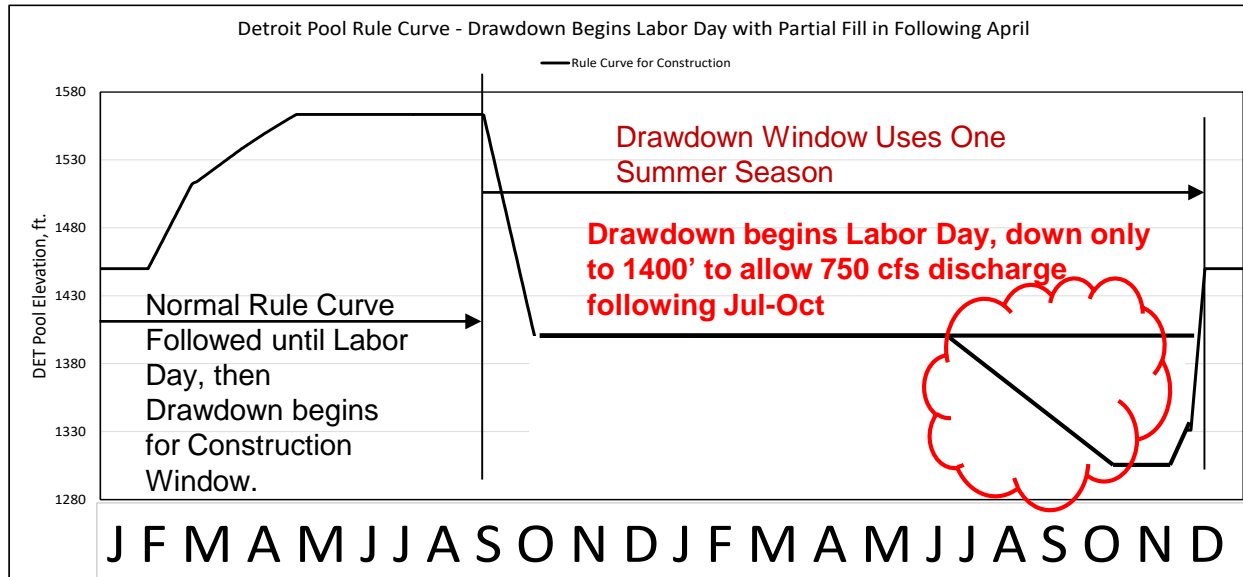
- Drawdown impacts are huge!



Detroit Downstream Passage Project: Variable Drawdown Possible Rule Curves



Risky – Relies on spring rains



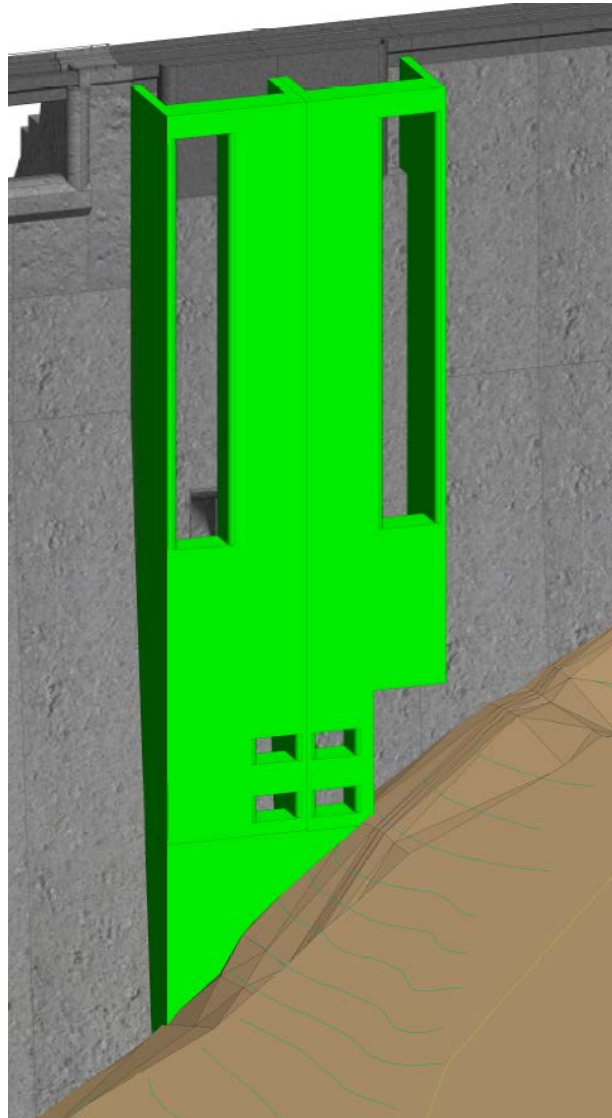
Pool is drafted to maintain minimum flows



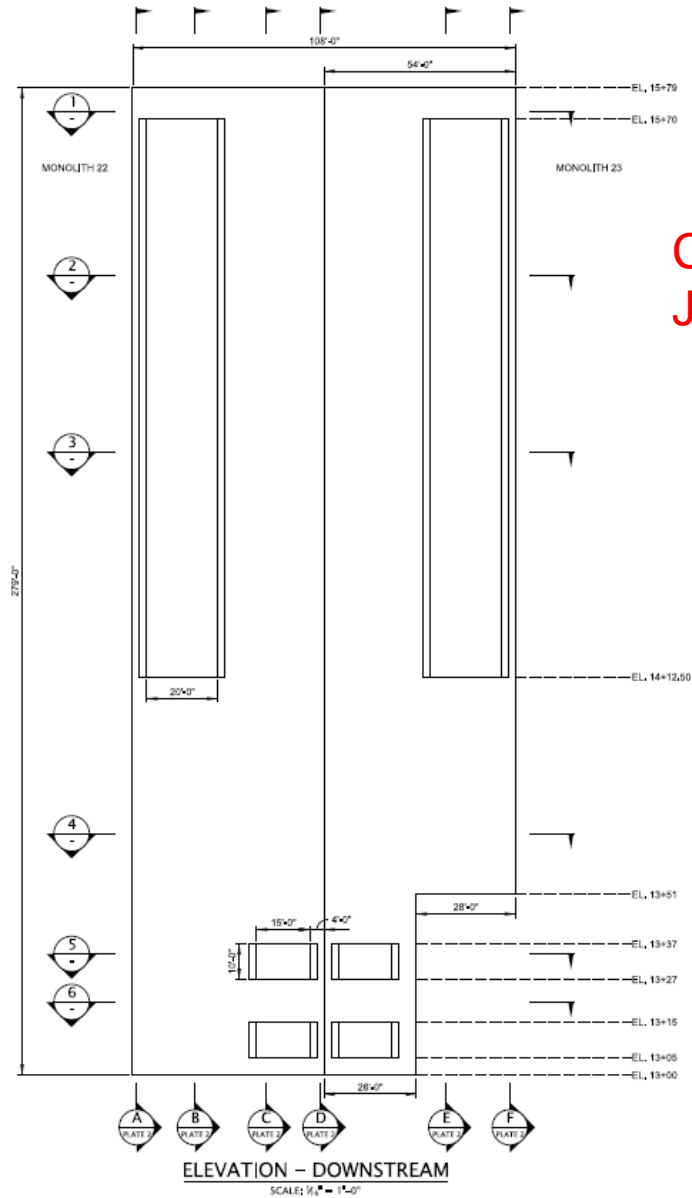
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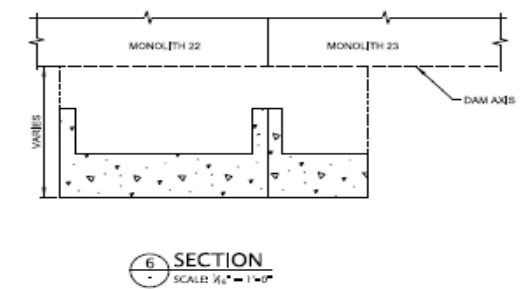
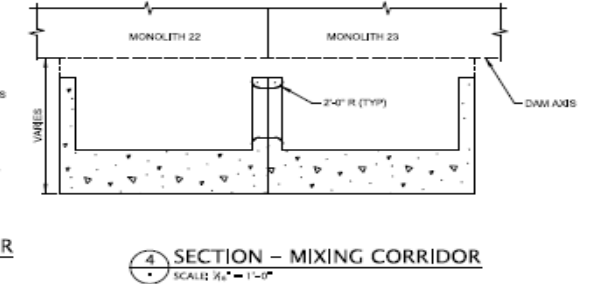
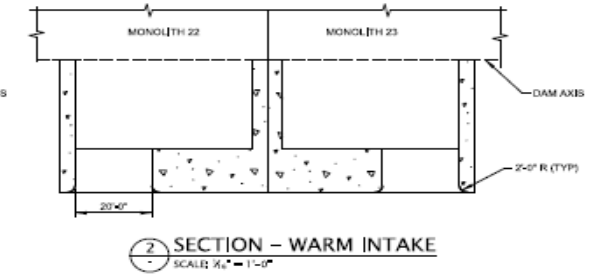
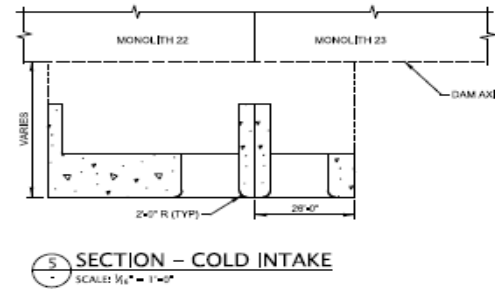
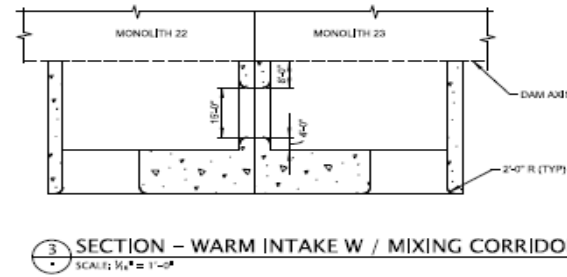
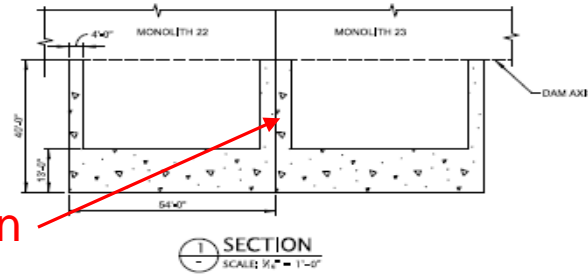
BUILD IN THE WET - ATTACHED TO DAM TOWER ISOMETRIC



OPTION 2 – ATTACHED TO DAM TOWER SECTION DETAILS



Contraction Joint

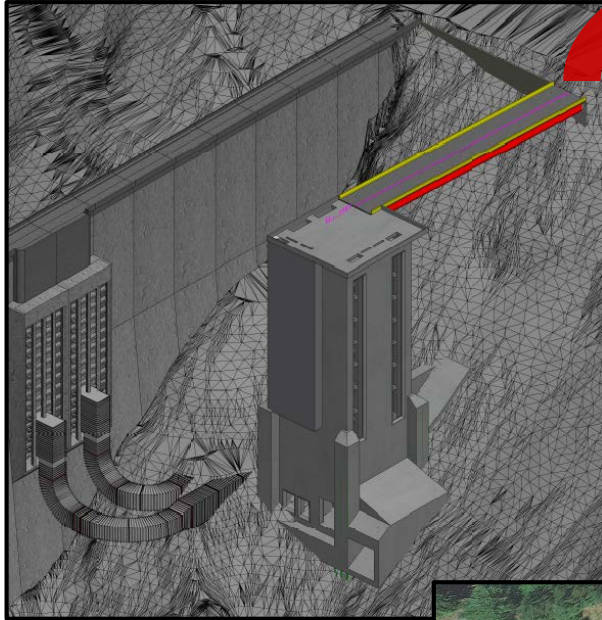


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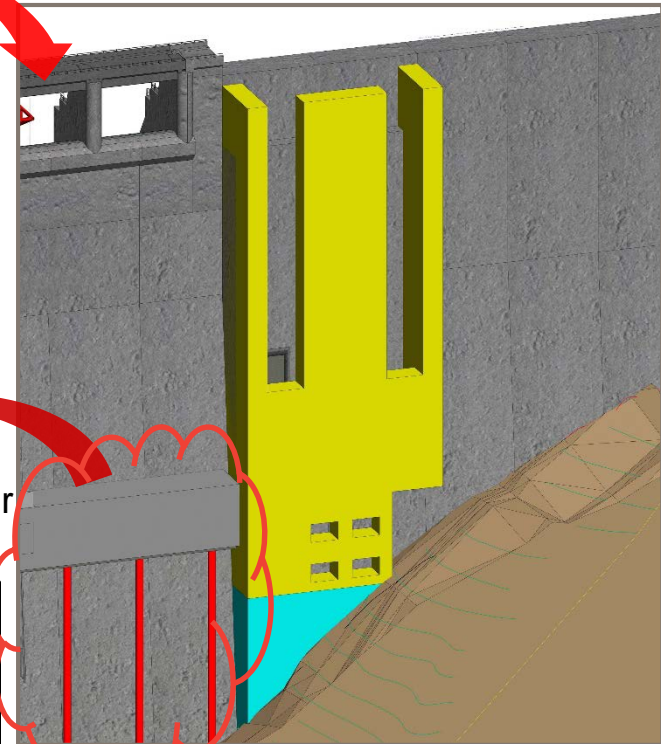
SUMMARY

Free Standing SWS

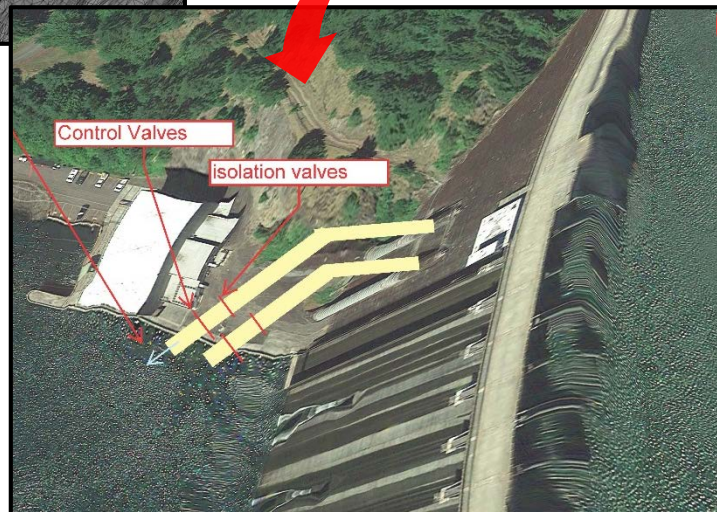


Ease underwater construction

Attached to Dam SWS



Eliminate underwater conduit construction



With no Impact to Biological Benefit

Still working NEPA process – decision not final – working communication plan – stay tuned



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Questions?



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